REMARKS

Reconsideration of the above referenced application, as amended, is respectfully requested.

Amendments to Claims

Claim 1 has been amended to indicate that the anchor layer is intermetallic anchor layer selected from the groups consisting of nickel, Ni/Cr/Al/Y, Co/Cr/Al/Y, Fe/Cr/Al/Y, Co/Ni/Cr/Al/Y, Fe/Ni/Cr, Fe/Cr/Al, Ni/Cr, Ni/Al, 300 series stainless steels, 400 series stainless steels, Fe/Cr and Co/Cr, and mixtures of two or more thereof. Basis for this amendment is recited in the specification at page 9, line 29 to page 10, line 2. Additionally, claim 1 has been amended to delete a functional limitation in view of the material description of the anchor layer.

Claim 6 has been amended to indicate that the anchor layer is electric arc sprayed. Basis is for this amendment is recited in the specification at page 10, lines 8-10.

35 USC § 103(a)

The Rejection

Claims 1-6 have been rejected under 35 USC § 103(a) as being unpatentable over Gebelius (U.S. Pat. No. 4,920,746) hereinafter "Gebelius" in view of Tonkovich et al. (U.S. Pat. No. 6,479,428) hereinafter "Tonkovich" further in view of Kudo (U.S. Pat. No. 4,305,910) hereinafter "Kudo" or EP 0831 211 hereinafter "EP '211" for the reasons presented in the Office Action at pages 2-3.

Gebelius

Gebelius is cited in the Office Action beginning at page 2, as disclosing an exhaust system comprising a tubular member and an insert inside the tubular member. The insert includes an exhaust fume

purifying catalyst. The insert is cited as comprising a longitudinally extending member made of a material having elastic properties, which surround bodies having spherical, tubular or any other desired configuration. The insert is also cited as having one or several through holes. The materials of Gebelius can be ceramic material or metallic materials. It is asserted that this fairly suggests "tubular" and perforated inserts.

It is recognized that Gebelius does not disclose an anchor layer.

The currently presented claims of the present application are directed to a pliable refractory metal carrier for use in a conformable catalyst member. The member includes an intermetallic anchor layer. As indicted in the specification at page 4, lines 24-26 the intermetallic anchor layer permits the member to receive a catalyst coating and retain the coating intact on the carrier when the carrier is bent.

As recited in the Office Action Gebelius does not disclose an anchor layer of any kind.

Accordingly Gebelius does not disclose or suggest the presently claimed invention.

Tonkovich

Tonkovich is cited as disclosing a porous metal foam support, an interfacial layer, and a buffer layer between the porous support and the interfacial layer. Tonkovich is cited as disclosing that the buffer layer provides a transition of thermal expansion coefficient from the porous support to the interfacial layer to reduce thermal expansion stress as the catalyst is heated to high operating temperatures. The buffer layer is also cited to reduce corrosion and oxidation of the porous support.

Tonkovich does not disclose or suggest the intermetallic anchor layer of the present claims. Tonkovich discloses a porous ceramic or metal foam support 100. There is a buffer layer 102 which is added to transition coefficients of thermal expansion. The buffer layer is disclosed to be a metal oxide (col. 3, lines 25-53). Tonkovich

discloses an addition high surface interfacial layer 104, also a metal oxide between the buffer layer 102 and the catalyst layer 106 (col. 3, lines 1-24). The interfacial layer 104 may also contain serve as a catalyst layer.

Therefore, both the buffer layer 102 and the interfacial layer 104 are disclosed to be metal oxide layers which are used to transition coefficients of thermal expansion.

Combination of Gebelius in view of Tonkovich

In rejecting claims 1-6 the Examiner concludes that it would be obvious to one of ordinary skill in the art to include a buffer layer and interfacial layer for the insert of Gebelius as suggested by Tonkovich.

Reconsideration of this conclusion is requested, since the presently claimed invention relates to an intermetallic anchor layer which permits the member to receive a catalyst coating and retain the coating intact on the carrier when the carrier is bent. Tonkovich discloses intermediate metal oxide layers to reduce thermal expansion stress as the catalyst is heated. Accordingly, it would not be obvious to combine the metal oxide transitional layers of Tonkovich with the insert of Gebelius to retain the coating intact on the carrier when the carrier is bent as presently claimed.

Kudo or EP 0 831 211

Kudo is cited as disclosing a catalytic reactor for reducing nitrogen oxide using tubular catalyst.

EP '831 is cited as disclosing that catalytic metal bearing member is desired to have tubular, corrugated shape. However neither Kudo nor EP '831 discloses or suggests a pliable refractory metal carrier for use in a conformable catalyst member having an intermetallic anchor layer. In the Office Action at page 3, last paragraph, the catalyst bearing member is indicated to have a corrugated shape. Reference is made to item 22, of Figure 7.

Reconsideration of this characterization is respectfully requested. Figure 7, is a cross-sectional view of Figure 6 at D-D. It appears that item 22 is a tube and the apparent corrugated item 24 is described as a cushion member at col. 9, line 36. There is no apparent description that item 24 is coated with catalyst.

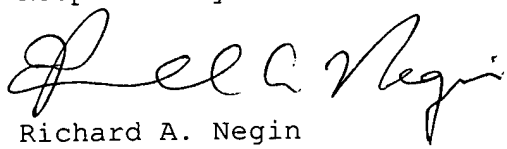
Combination of Gebelius in view of Tonkovich further in view of Kudo or EP 0 831 211

Kudo and EP '211 do not disclose or suggest a pliable refractory metal carrier for use in a conformable catalyst member as claimed in claims 1-3 and 6 or the tube of claims 4 and 5. Reference is made to the above remarks distinguishing Gebelius in view of Tonkovich. The disclosures of Kudo and EP '211 of tubular catalyst members, do not compensate for the deficiencies of Gebelius in view of Tonkovich relating to pliable refractory metal carrier for use in a conformable catalyst member having coated thereon an intermetallic anchor layer.

Accordingly, withdrawal of the rejection and allowance of claims 1-6 as obvious over Gebelius in view of Tonkovich further in view of Kudo or EP 0 831 211 is respectfully requested

Applicants submit their application is in condition for allowance and respectfully request the same. Should the Examiner have any further questions or require further clarification, the Examiner is invited to telephone the undersigned at the number given below.

Respectfully submitted,



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